

THE "EIRA" EXPEDITION

AFTER the horrors of the *Jeannette* expedition, every one will be relieved to learn that on Sunday Mr. Leigh Smith and all his men were safely landed at Aberdeen in the *Hope*, under the care of Sir Allen Young. Sir Allen has not been long in attaining the object for which he set out, although the safety of the *Eira* expedition would have been secured, even had no help been sent from England, for when they reached Matotschkin Schar, they found both the *Willem Barents* and a Russian vessel. The scientific results of the expedition, we regret to say, are almost *nil*.

On June 14, 1881, the *Eira* left Peterhead. The ice reached very far south, and no opening could be found to enable her to get north until the middle of July. Franz Josef's Land was reached on July 23, and the *Eira* steamed along the coast to within fifteen miles of Cape Ludlow. The ice was closely packed to the north, so it was decided to return to Gray Bay and wait till a more favourable opportunity should present itself to proceed. On August 7 the *Eira* was made fast to the land-floe near Bell Island, and a storehouse was erected of materials taken out in the ship. On August 15 she left Bell Island, and, being unable to pass to the eastward of Barents Hook, she was made fast to the land-floe off Cape Flora. The next few days were spent in collecting plants and fossils, which unfortunately were lost with the vessel. On August 21 the *Eira* was heavily nipped by the ice, and about 10 a.m. a leak was discovered, and barely two hours elapsed till the vessel had to be abandoned. All the boats were saved, and most of the men saved some clothes and bedding.

The tent was ultimately erected on Cape Flora, and here the expedition spent the winter, making the best of their circumstances. But little food had been saved, and the party had therefore to keep a sharp look out for walrus, bears, and other native game, on which they lived, and on which, along with a daily drop of rum, they maintained their health, according to the report of the surgeon. There were one or two cases of illness, but no trace of scurvy, though 70° of frost were at times experienced. In June the ice was cleared away, and on the 21st four boats were started from Cape Flora, with twenty-five men and provisions for six months. The *Eira* men were more fortunate than the discoverers of Franz Josef Land in their escape; for although they had sometimes to drag their boats over the ice, they reached Novaya Zemlya, at Matotschkin Schar, on August 2. Next day they were sighted by the *William Barents*, and as Sir Allen Young, in the *Hope*, was only a mile away, Mr. Leigh Smith and his men were soon welcomed on board the steamer sent to rescue them.

When Mr. Smith publishes his detailed narrative, we may find that he has been able to make some addition to a knowledge of the geography and natural history of the region where he has wintered, though we fear it cannot be much. All his collections went down with the *Eira*, so that science cannot be a great gainer by his expedition. Until details are to hand, it is impossible to say whether the catastrophe to the vessel could have been avoided, or whether it was one of those accidents for which all Arctic explorers must be prepared. The ice seems to have been in motion very early this year for that region, and we know that it has come down unusually far south; any information concerning the movements of the ice in high latitudes during the past spring and summer would be welcome.

The following is an interesting extract from the journal report upon Cape Flora (obtained by the *Times* Aberdeen Correspondent), giving an account of the birds, bears, and walrus seen during the winter spent there:—

"On July 25, 1881, we reached Gray Bay, at Cape Grant and Cape Crowther. There are large loomerics a short distance up the bay on the water side. Many

rotgees had their young among the basaltic columns of the lofty cliffs. Other birds were also seen, including the snow bird, the molly, the boatswain, the Arctic lark, dove-kies, the eider duck, the burgomaster, and the kittiwake. At the east side, near the head of Gray Bay, there were a good number of snow birds and dove-kies building, but too high up for one to obtain the eggs. At Cape Stephen there was a large loomery, and at Cape Forbes there were a few looms, a good number of rotgees and dove-kies, and some snow birds. At Bell Island the same species of birds were seen, and on the south side there was a large loomery and nests of kittiwakes, dove-kies, rotgees, snow birds, and burgomasters. Rein-geese and brent-geese were seen and shot on the cliffs 700 feet high, but no nests were seen. At Cape Flora there was a very large loomery, and also many rotgees, dove-kies, kittiwakes, and snow birds. On the lowland several snow buntings and sandlings were seen, but no nests were found. The looms lay their eggs on the bare rock, and the dove-kies and rotgees lay them in the crevices of the rocks. The kittiwake makes a nest of mud and moss. The snow bird makes a rudimentary nest of moss and feathers, but of no definite shape. Each species seems to occupy a separate part of the cliff. The rotgees and dove-kies left about the first week in September. Looms were very scarce after September 10. On September 22 a few burgomasters, snow-birds, mollies, kittiwakes, eider ducks, and brent-geese were seen, but getting very scarce. One or two snow buntings still remained on the land on October 13. Three or four snow birds, and occasionally a burgomaster or molly were seen hovering around outside the hut which had been erected, and on October 28, while we were killing some walrus, two snow birds, two or three mollies, and burgomasters were seen, and remained for two or three days eating the refuse of the carcasses. On February 8 a snow owl was seen. This was the first bird to arrive. On February 18 two or three flocks of dove-kies were seen following to the north-west, and on the 20th there were a great number seen in the water. On March 2 a lane of water was made close to the land-floe, and it was filled with rotgees and dove-kies. On March 9 the first loom was seen, but it was not until the end of March that they began to settle on the rocks, and then they would only stop on the cliffs for a few hours and go away for four or five days. We were not able to get up the hill to shoot any until April 16. On April 20 the first snow bird was seen. A falcon hawk appeared on April 22, on which day two burgomasters were also seen. On April 24 the molly was seen. On May 6 the kittiwakes came. It was not until about June 10 that the looms remained on the rocks for more than two or three days at a time, but after that date the females began to take their places ready for laying the eggs, and on June 20 three eggs were obtained. Foxes were constantly troubling us during the winter, coming right up to the door after blubber, and would only run a few yards away when anybody went out to drive them off. We were obliged to shoot some at last as they became almost tame. Bears were more numerous while we had the water close outside the land ice. They would come walking along the edge of the land ice, and when they got scent of the house would walk right up to it. During the dark we killed four or five every month, except November, but we saw on an average two a week. One moonlight night in November there were five or six bears within 400 yards of the house, but we could not get a shot at any of them unless we kept very still until the bear came up to the house. We never shot a female bear from October to March 13. This is an important fact. They were always very large male bears. Several times on examining the contents of the stomach we found them full of nothing but grass; but in the spring they generally had been feeding on seals, and more than once we obtained a good bucketful of oil for cooking purposes out of the bear's

stomach. Once a bear had eaten a large piece of greasy canvas which had been thrown away and had been blown some 200 or 300 yards from the house. He then came up to the house and commenced to eat our blubber, but was immediately shot. On February 20 a bear was seen about 350 feet above the hill at the back of the house. Some hands went up with a rifle and found that the bear had a hole there, out of which they could not get it—fortunately for them, as they had only one rifle with them, and that would not go off, the lock having been frozen. We never saw any young bear with it. The last time the bear was seen at its hole was on March 1. No track of a bear could be traced up the hill, but the foot-marks of an old bear and a cub were seen on the low land, about 300 yards to the eastward of the house. No old she-bears with young cubs were seen before we left the land in June. In July, 1881, on nearing Cape Crowther, walrus were seen lying on loose pieces of ice in great numbers. Sometimes twenty or more were counted huddled up in a heap on a small piece of ice. By going quietly in a boat you could get within twenty or thirty yards of them before they took much notice of you, but after the first shot was fired they tumbled into the water, and would go swimming about and barking round the boat, but never attacked us. In September they were very numerous on the loose ice round Bell Island, and also in the water off Cape Flora. On October 28 five were shot lying on the ice edge. When the daylight returned in February, walrus were constantly seen swimming about in the water. A land floe began to form in March, and no water remained within seven or eight miles of the land, but frequently on looking with the glass from the hill, walrus could be seen in the water, and on June 13 the land ice broke away, and on June 15 the five walrus were shot. A boat that went over to Bell Island reported that walrus were lying in scores on the loose ice round about Bell Island. Mr. Leigh Smith thinks that the walrus leave the country during the winter, but seem to remain in the water, especially if it is shallow. They never saw any signs of their taking the land and lying up for the winter. White whales and narwhal were seen in great numbers in September and October travelling to the south-east, and in June one or two large shoals were seen travelling west and west-north-west."

PROFESSOR HAECKEL IN CEYLON¹ IV.

PROF. HAECKEL, in describing his first impression of Galle, does not fail to mention as one of its principal features the long lines of shady Suriya trees and flowering Hibiscus, planted by the Dutch, and giving the streets the appearance of a garden. He says nothing, however, of a plague produced by the Suriya, and noted by other travellers, namely, the hairy green caterpillar, which frequents it in great numbers. At a certain stage of its growth it drops to the ground, and there hides in order to pass through its metamorphosis. When, as often happens, it alights on some passer-by, it inflicts a sting more severe and far more lasting than that of a nettle or star-fish.

The professor found himself, as might have been expected, a welcome guest to all the cultivated and wealthy merchants of Galle. The few days of his stay there were passed at Queens-House, formerly the official residence of the Governor, now the property of Messrs. Clark, Spence and Co., by whose present head, Mr. Henry Scott, Prof. Haeckel was hospitably entertained, every facility being afforded him for the prosecution of his studies. Among the English residents to whom Prof. Haeckel brought letters, and who vied with each other in making his visit to Galle both profitable and agreeable, he makes special mention of Capt. Blyth and Capt. Bayley.

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The Villa Marina of the latter gentleman is one of the most charming spots in the neighbourhood of Galle. Built upon a rock jutting far out into the sea, but thickly grown with screw pines, it commands a lovely view of the town and harbour, with a picturesque foreground of rugged black rocks, which serve to enhance the beauty of the fairy-like tropical garden immediately surrounding the Villa.

"Among the many charms of this garden I was particularly interested to find several beautiful examples of the Egyptian Dhum-palm (*Hyphane thebaica*). The stem of this palm does not, like others of the same family, consist of a slender column, but has forked branches, like the Dragon trees, or *Dracaenæ*; each limb carries a crown of feather-shaded leaves. I had first seen this remarkable palm in the Arabian village of Tur, at the foot of Mount Sinai, and I gave a description of it in my work on 'Arabian Corals.' Great, therefore, was my surprise at finding it here in so altered a dress that I should scarcely have recognised it. The process of adaptation to its altered conditions of existence had completely transformed the tree. The stem was at least twice as large and strong as that of the Egyptian Dhum Palm; the forked branches were more numerous, shorter, and closer together; the huge, feathery leaves were much larger, more luxuriant, and thicker, and the flowers and fruit appeared, as far as my memory served, to have gained in size and beauty.

"In fact every part of the tree had been so modified by the forcing climate of Ceylon that its inherited characteristics seemed in great measure to have disappeared. This magnificent tree had been sown from Egyptian seed, and in twenty years had reached a height of thirty feet. . . .

"Capt. Bayley's charming villa, the Miramare of Galle, is as interesting to the zoologist as to the botanical student. A miniature menagerie constructed in the court-yard contains many curious mammalia and birds, as for example, an ostrich from New Holland, several owls and parrots, and a native ant-eater (*Manis*). This last, together with some curious fish, Capt. Bayley was so kind as to present to me; and later on, at Belligemma, he sent me a Christmas present of a pair of interesting Loris (*Stenops*).

"But more attractive to me than even these curious animals was the splendid coral which covered the surrounding rocks; even the little harbour in which the Captain moored his boat and the stone jetty which formed the landing-place were profusely covered with it, and a few hours sufficed to secure valuable additions to my collection of corals. A large proportion of the animal life inhabiting the extensive coral banks of Galle is here to be found, as it were, epitomised; gigantic black sea-urchins and red star-fish, numerous crabs and fishes, bright-coloured snails and mussels, and curious marine reptiles of many kinds swarmed on the coral branches and crept from between their crevices. No better or more convenient spot could be found for the establishment of a zoological station than Captain Bayley's villa, which, as it so happens, his approaching removal to Colombo renders him willing to dispose of."

Once landed on a coral reef, Prof. Haeckel finds himself at the goal of his desires, and his account of the submarine coral banks which to a great extent block the entrance to the harbour of Galle is too interesting not to be given at length. He regrets at the outset that he could only devote days instead of weeks to their examination. "In this respect, the Viennese artist, Ransonnnet, was more fortunate. Possessed of every necessary appliance, including a diving-bell, he was able to devote several weeks to the inspection of the coral banks of Galle, and has given a minute description of them in his illustrated work on Ceylon (Braunschweig, Westermann, 1868). Four coloured plates, for which he made the